

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 February 2004 (19.02.2004)

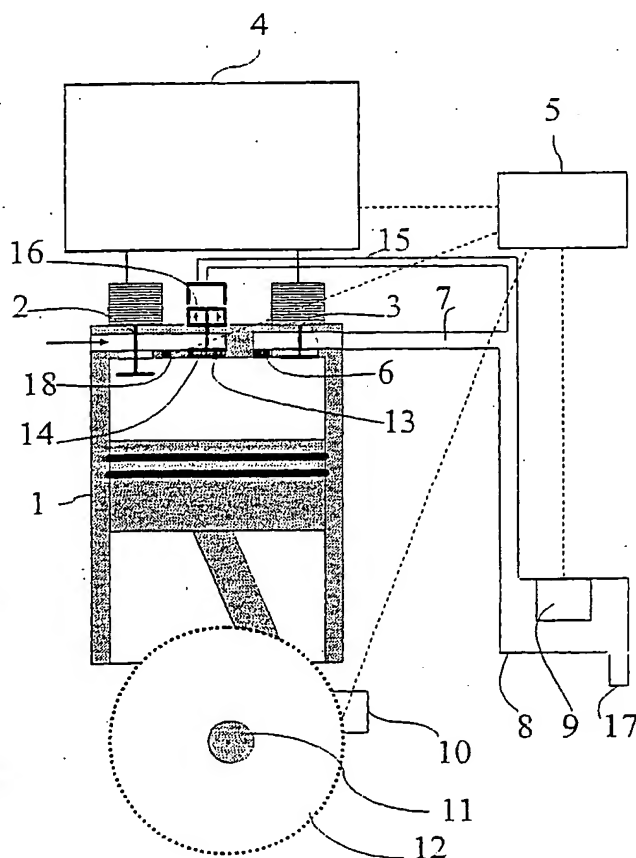
PCT

(10) International Publication Number
WO 2004/015270 A1

- (51) International Patent Classification⁷: **F04B 49/03** // 49/035, 49/06, 49/24
- (21) International Application Number:
PCT/SE2003/001263
- (22) International Filing Date: 12 August 2003 (12.08.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
0202403-2 13 August 2002 (13.08.2002) SE
- (71) Applicant (for all designated States except US):
CARGINE ENGINEERING AB [SE/SE]; Kompanigatan 10, 1 tr, S-254 38 Helsingborg (SE).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): HEDMAN, Mats [SE/SE]; Båvensvik, S-640 34 Sparreholm (SE).
- (74) Agent: DR. LUDWIG BRANN PATENTBYRÅ AB; Box 171 92, S-104 62 Stockholm (SE).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: A CONTROL METHOD FOR CONTROLLING THE GAS FLOW IN A COMPRESSOR



(57) **Abstract:** The invention relates to a control method for controlling the gas flow by a compressor in which a volume is expanded during an intake stroke and the intaken volume of gas is compressed and taken out through a non return valve (6) for outflow and/or an operable outlet valve (3) during an evacuation stroke, and in which the compressor has a controllable inlet valve (2) that is pneumatically, hydraulically or electromagnetically operable and that is opened and closed upon basis of a signal from a control system. The inlet valve (2) is kept closed during at least a part of an intake stroke.